

Amendments to the Specification:

Please replace the paragraph beginning at page 5, line 26, with the following rewritten paragraph:

-- Exhaust gas in intermediate pressure EGR loop line **50** is maintained by exhaust turbine **32** at an intermediate pressure less than the pressure at the intake manifold **16** of engine **14**. Exhaust gas diverted to intermediate pressure EGR loop line **50** passes through DPF **52**, which DPF **52** is optionally miniature in size, and is cooled by EGR cooler **54**. Intake air enters first stage **34** at air intake **40**, is compressed by first stage **34** to an intermediate pressure less than the pressure at the intake manifold, exits through air line **42**, and is cooled by air/air charge cooler **44**. The exhaust gas pressure in intermediate pressure EGR loop line **50** is sufficiently higher than the discharge pressure of the first stage **34** to eliminate the need for creating a negative pressure gradient to enable the EGR to flow in the correct direction. However, that exhaust gas pressure is less than the pressure at ~~intake manifold 64~~ intake manifold 16--

Please replace the paragraph beginning at page 6, line 15, with the following rewritten paragraph:

--The Air/EGR mixture exit EGR mixer **46** by means of second stage inlet line **48** and enters second stage **36** of compressor **80**. Second stage **36** compresses the Air/EGR mixture to a pressure required by the engine to transit the desired mass flow. The Air/EGR mixture proceeds

through intake line 60, is cooled by air/air charge cooler 62 and proceeds through intake line 64 to enter intake manifold 16.--

Please add the following new paragraph after the paragraph ending on line 5 of page 7:

-- In the EGR system the turbocharger can include a case having a turbine housing receiving exhaust gas from an exhaust manifold of an internal combustion engine at an inlet and having an exhaust outlet, a compressor housing having an air inlet and a first volute, and a center housing intermediate the turbine housing and compressor housing. A turbine wheel is carried within the turbine housing and extracts energy from the exhaust gas, with the turbine wheel connected to a shaft extending from the turbine housing through a shaft bore in the center housing. A bearing is supported in the shaft bore of the center housing, with the bearing supporting the shaft for rotational motion. A compressor impeller is connected to the shaft opposite the turbine wheel and carried within the compressor housing, with the compressor impeller having a first plurality of impeller blades mounted on a front face proximate the air inlet, the first plurality of blades increasing the velocity of air from the air inlet and exhausting air into the first volute. The compressor impeller also has a second plurality of impeller blades mounted on a back face, the second plurality of blades increasing the velocity of air from a scroll inlet connected to the first volute and a source of exhaust gas and exhausting the mixture of exhaust gas and air into a second volute having a charge air outlet connected to the engine intake, with the scroll inlet and second volute integral to the case and intermediate the compressor

housing and turbine housing. In the EGR system, the second plurality of impeller blades compresses the mixture to a pressure required by the engine to transit a desired mass flow. The EGR system of further includes a diesel particulate filter to filter the exhaust gas before the exhaust gas enters the second plurality of blades.--